

ABSTRACT

Techniques to reduce transmit power required for transmission of messages from an access terminal to reduce interference to transmissions from other access terminals. In one aspect, messages to be transmitted are defined and/or coded such that they may be detected at different received signal qualities. The codewords may be defined having different distances to their nearest codewords. In another aspect, messages to be transmitted are assigned to different points in a signal constellation, with the points being located such that they may be received at different signal qualities. Codewords that may be received at a lower signal quality may be assigned to messages more likely to be transmitted at higher transmit power levels (e.g., when the access terminal is located further away) or to more frequently transmitted messages.

TECHNICAL ABSTRACT